

Figure 1

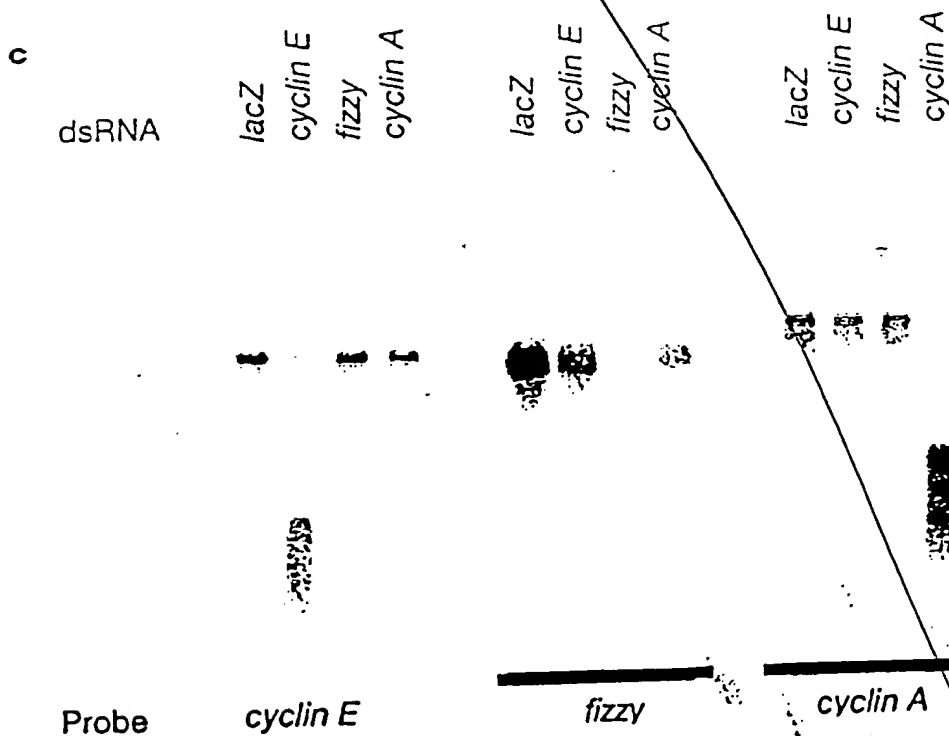
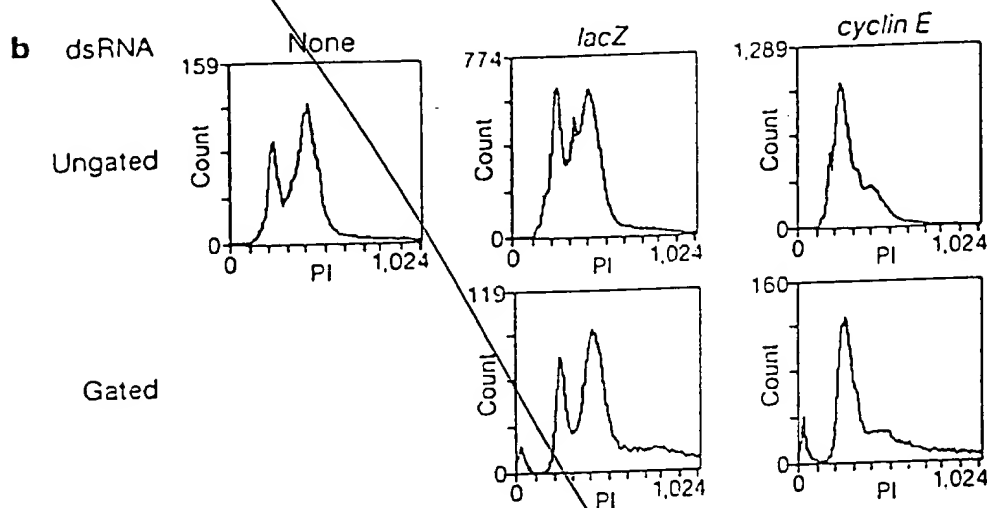
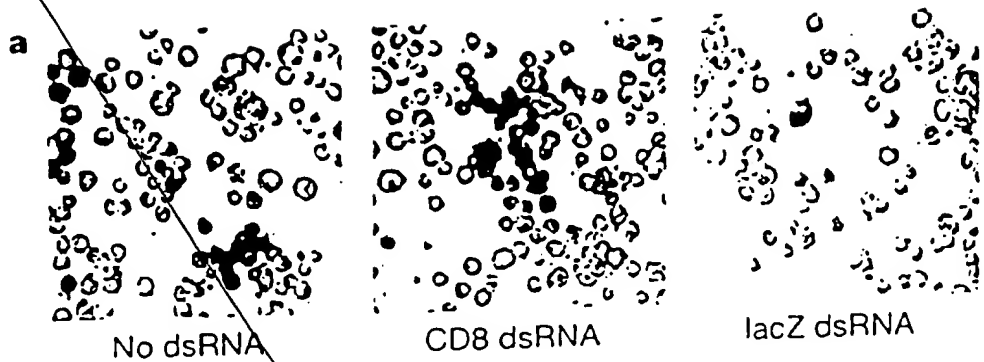


Figure 2

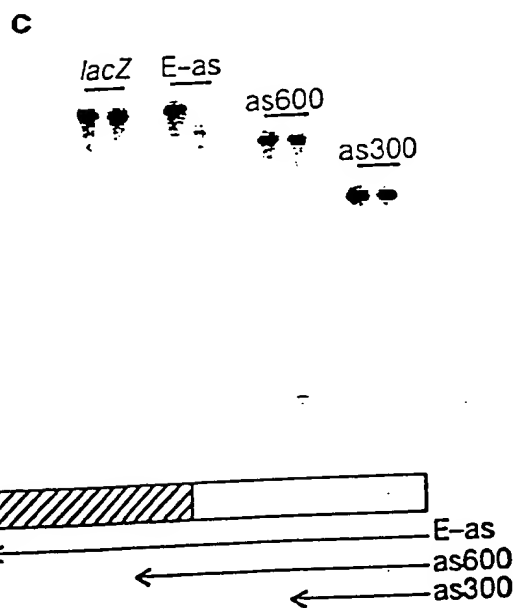
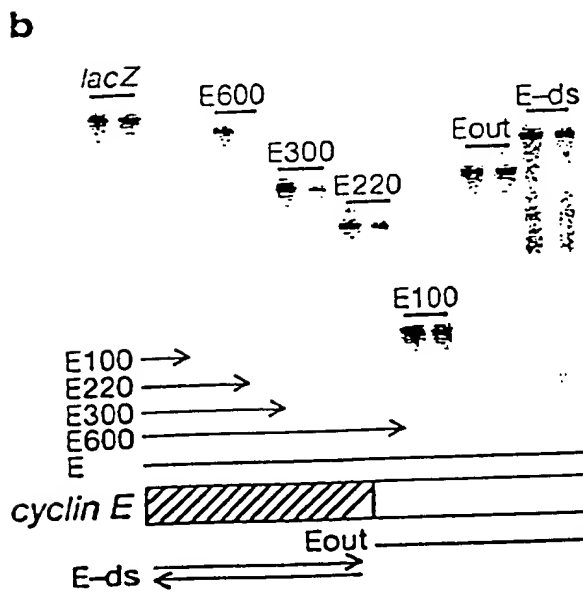
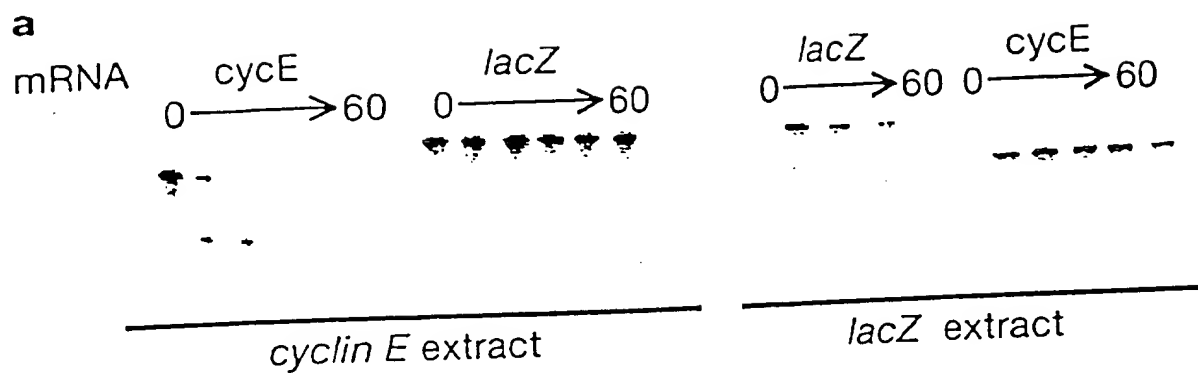


Figure 3

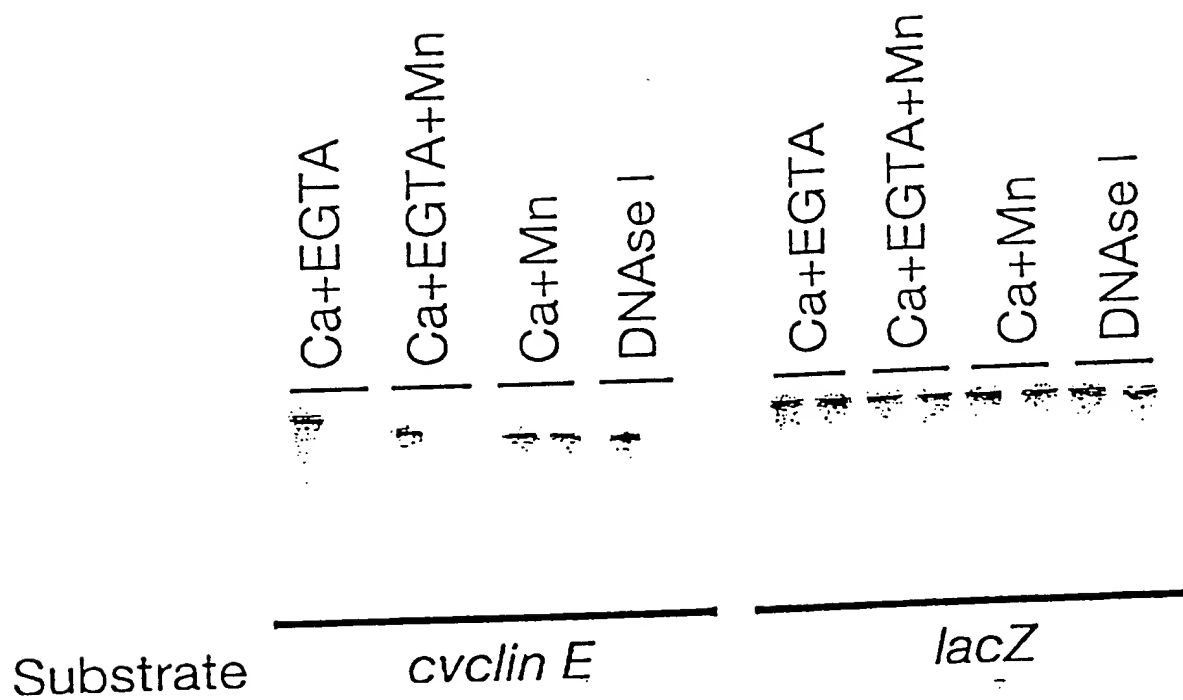


Figure 4

a

S100
Crude extract

~25 nt.—

b

lacZ

cyclin E

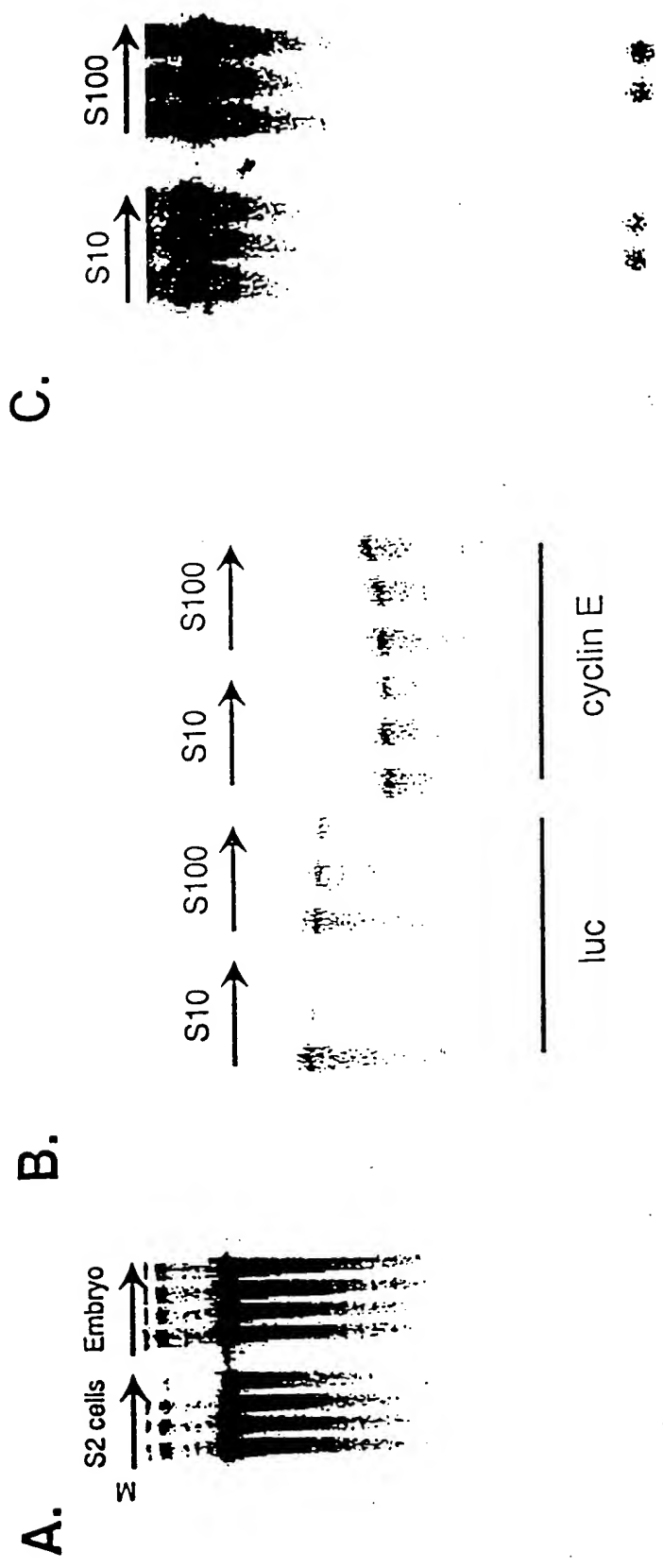
~25 nt.—

cyclin E
Northern

2559446.0

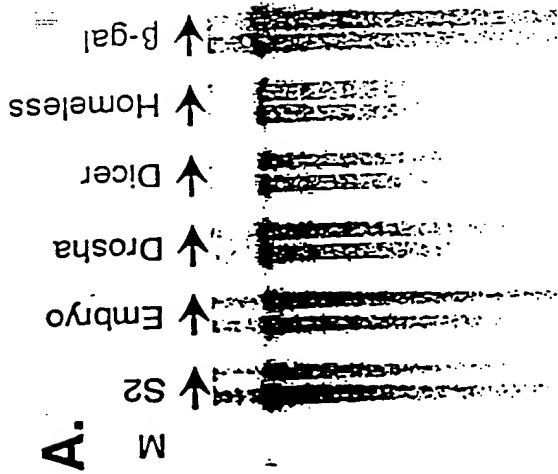
107,2167" 25594000

Figure 5

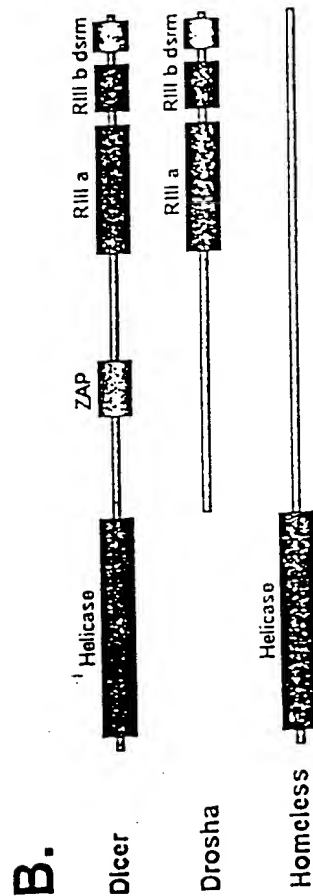


000010" 2559100.0

Figure 6a-c



marker
pre-immune
immune
plus peptide
extract



D. $\frac{IP}{ATP} - \frac{Ext}{-}$

யி

total	RISC - hs	RISC - ls
100	100	100

Dicer IP
RISC
control
marker

LL

Figure 6d-f

Figure 7

A. casp9 dsRNA
dicer dsRNA

B.

C.

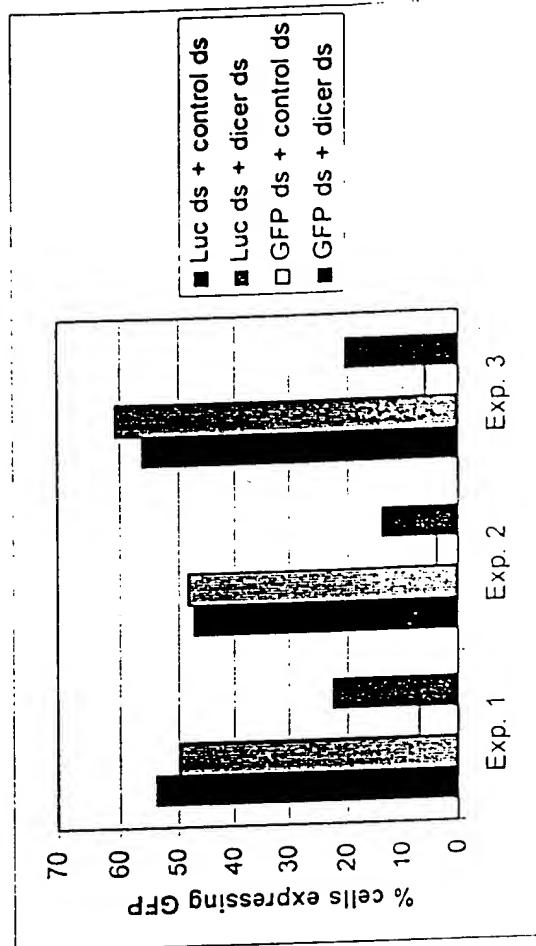


Figure 8A, B

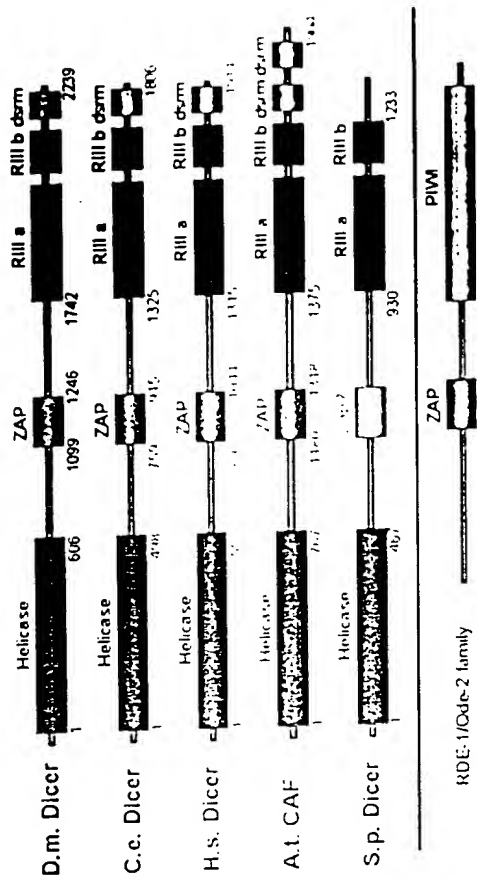
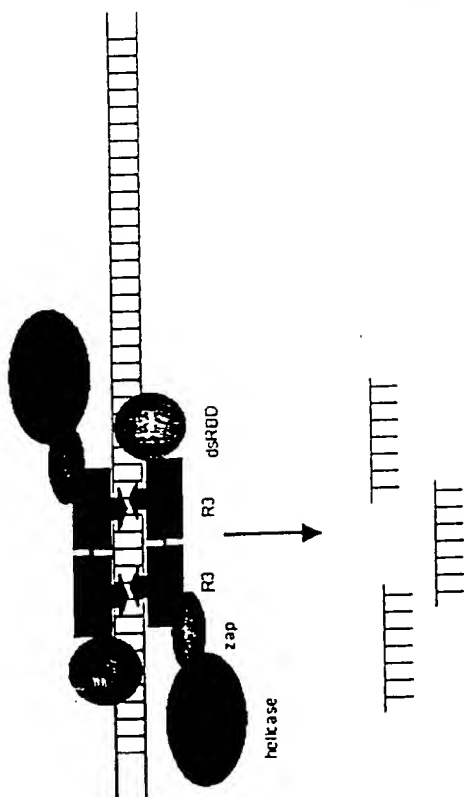


Figure 9

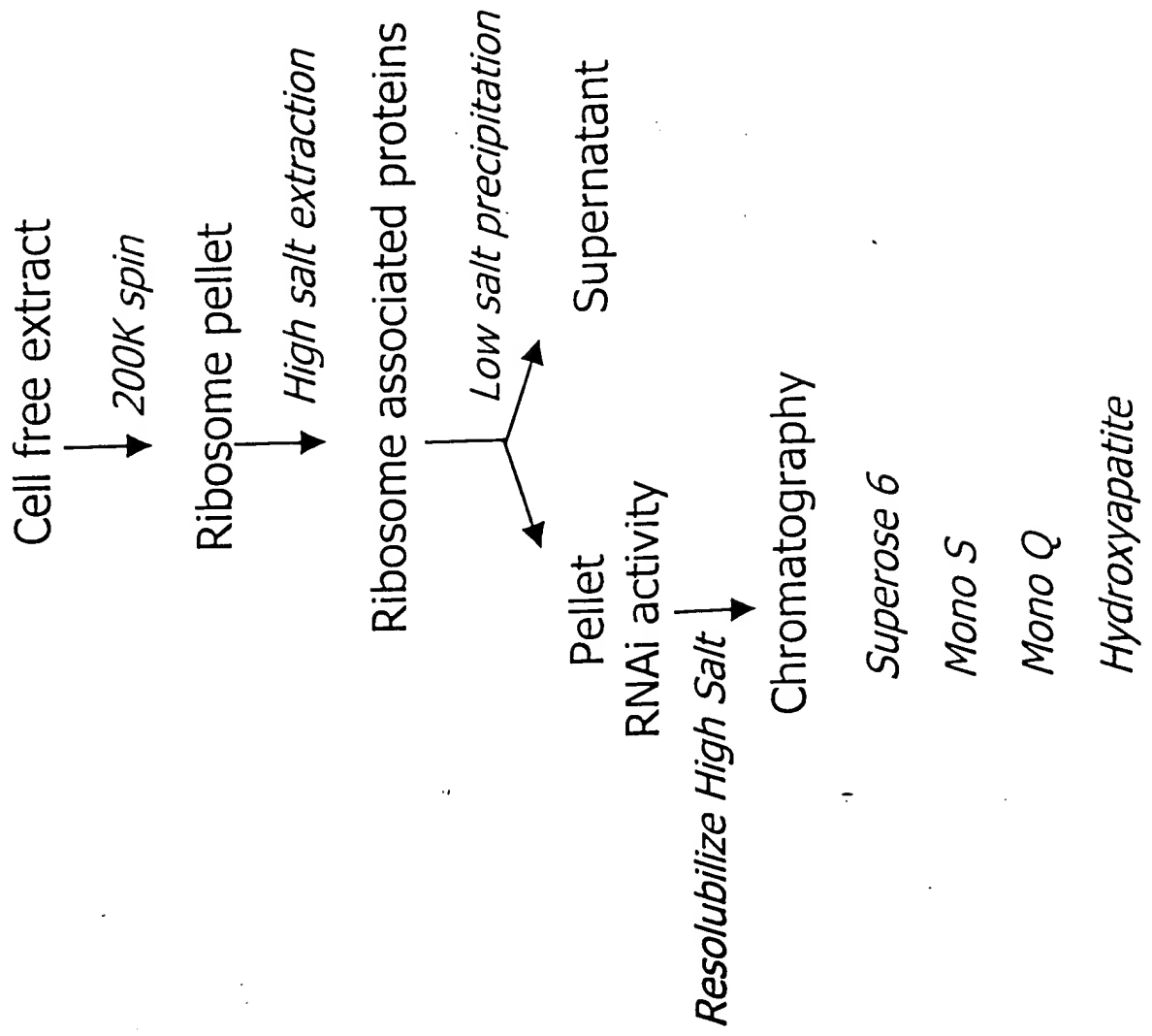


Figure 10

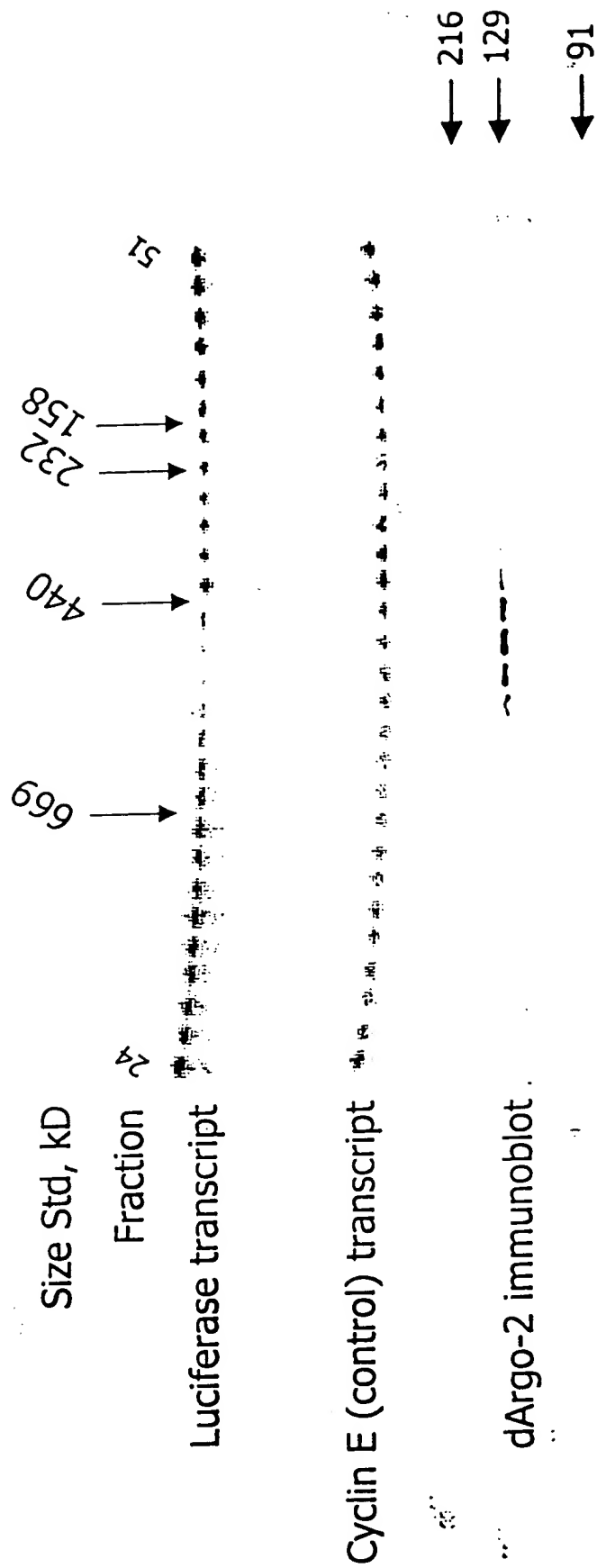
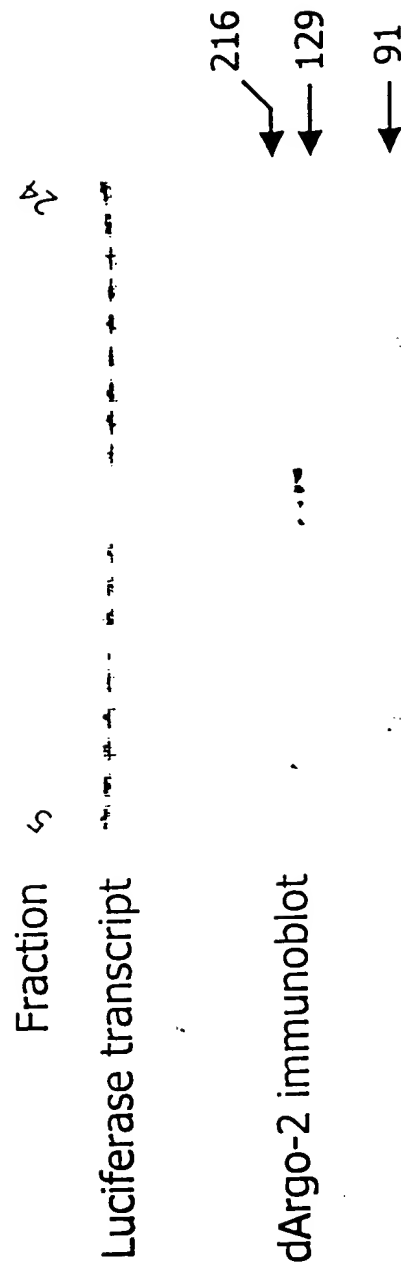


Figure 11



104250" 25599860

Figure 12

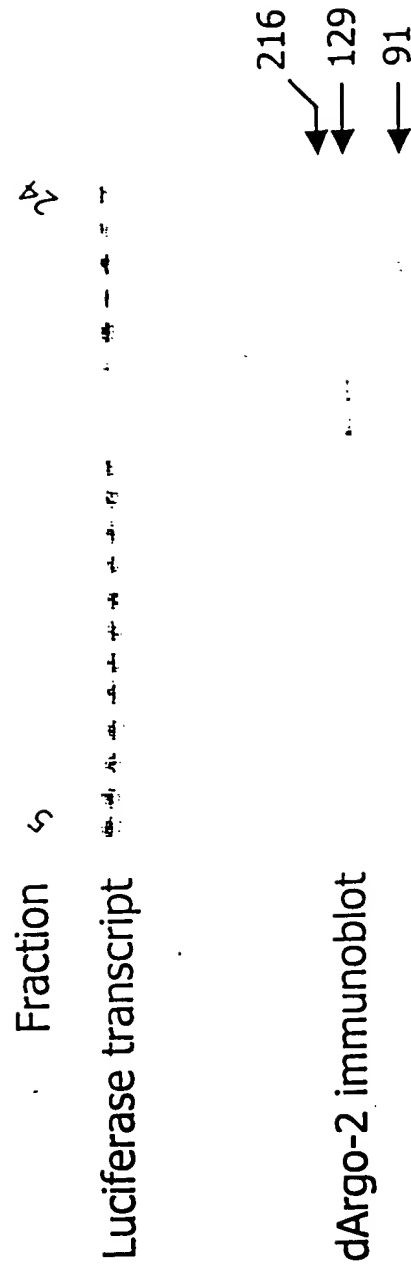


Figure 13

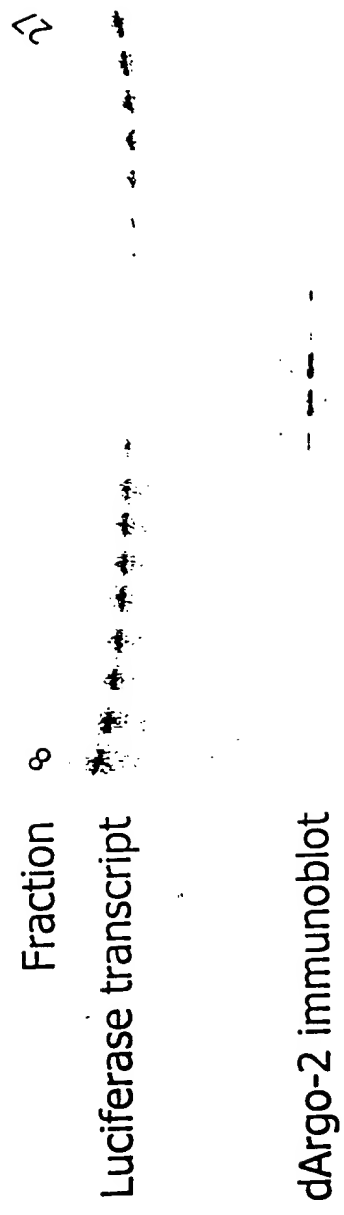


Figure 14

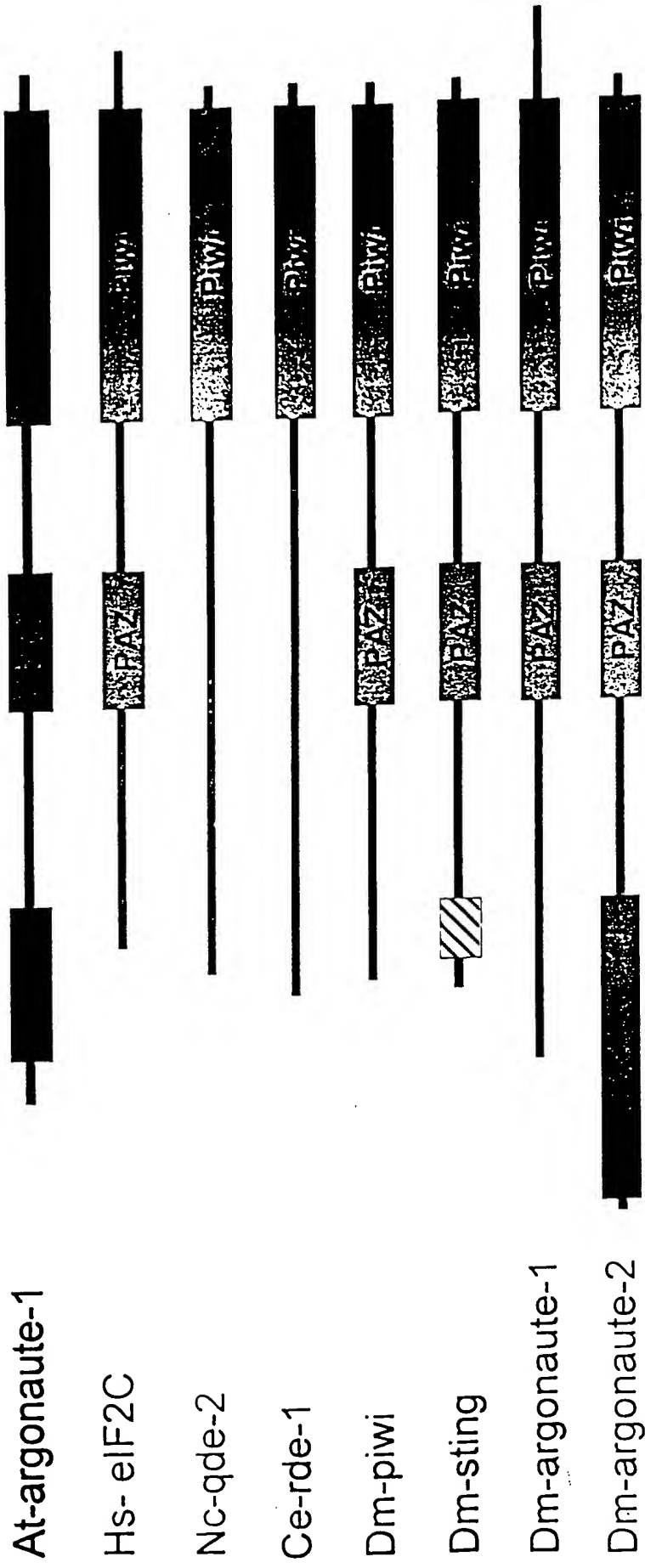


Figure 16

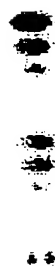
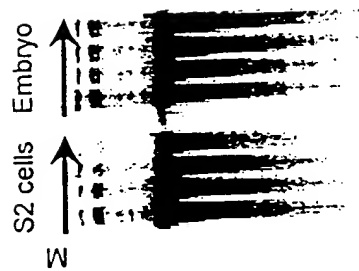
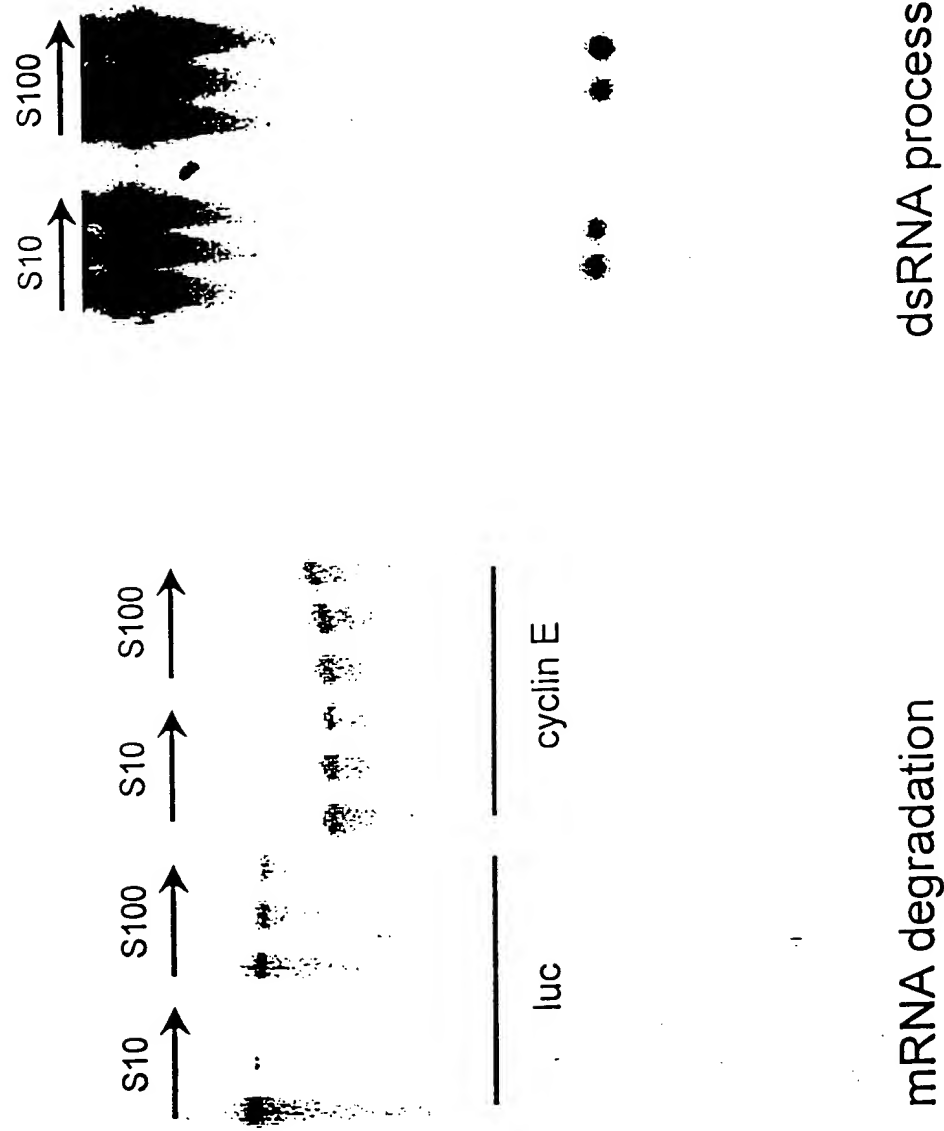


Figure 17

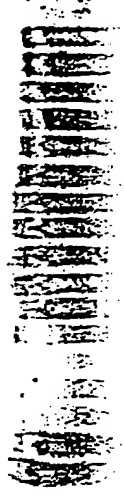


FOH250" 25599860

Resource Phenyl



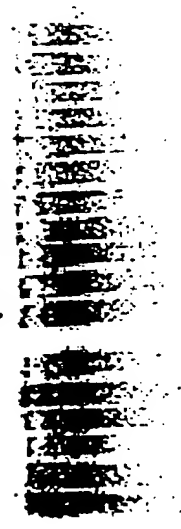
Q-sepharose



HAP



Superose



S-sepharose



Figure 19

Purification of the 22-mer generating enzyme

101250" 45549860

Figure 20

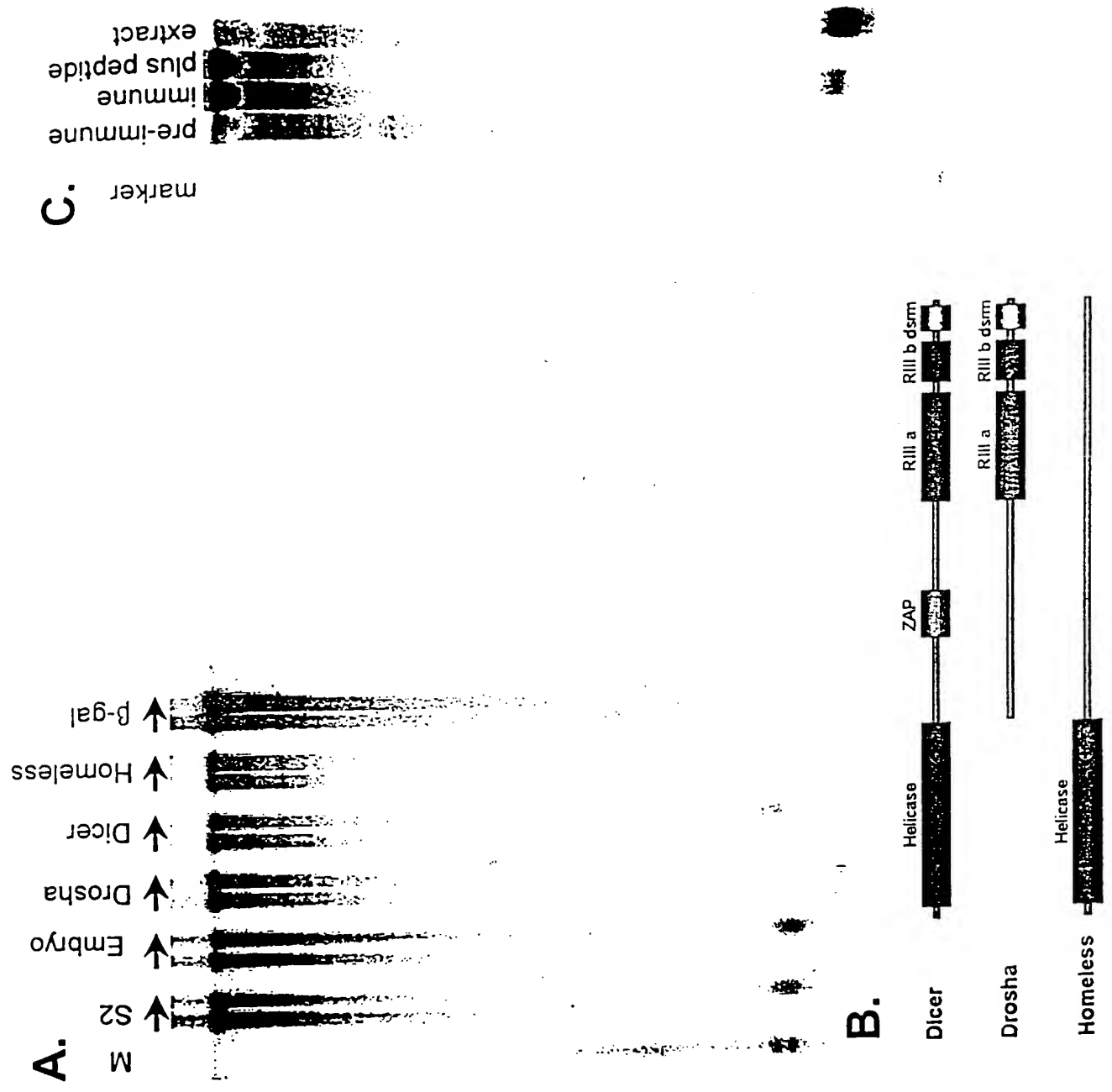
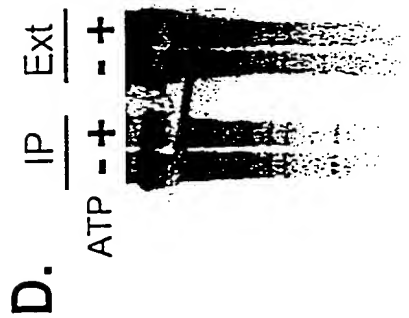


Figure 21



104250" 25599860

Figure 22

Dicer IP
RISC
control
marker

F

RISC - hs
RISC - ls

E

total

Figure 23

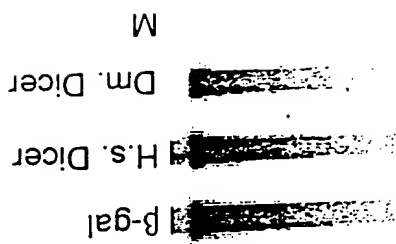
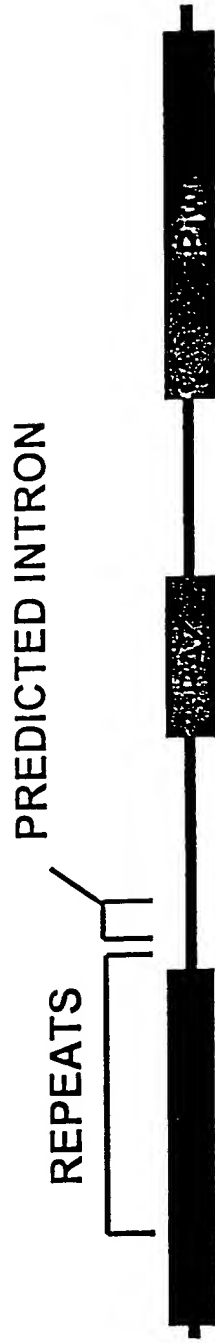


Figure 24

MGKKDKNKKGGQDSAAAPQPQQQKQQQQRQQPQQQQPQQQQPQQQQPQQQQQ
 QPHQQQQSSRQQPSTSSGSRASGFQGGQQKQSDAEGWTAQKKQKQVQGWTKQ
 GQGGHQGRQGGQDGGYQQRPPGQQGGHQGRQGGEGGYQQRPPGQQGGHQGRQ
 QEGGYQQRPSGQQGGHQGRQGGEGGYQQRPPGQQGGHQGRQGGEGGYQQRPSGQ
 QGGHQGRQGGEGGYQQRPSGQQGGHQGRQGGEGGYQQRPSGQQGGHQGRQGG
 EGGYQQRPPGQQPNQTSQQGYQSRGPPQQQAAPLPLPPQAGSIKRGTIKPGQVG
 INYLDLDSKMPVAYHYDVKIMPERPKKFYRQAFEQFRVDQLGGAVLAYDGKASCYS
 VDKLPLNSQNPEVTVTDNRGRTLRYTIEIKETGDSIDLKSLTTYMNDRI**FDKPMRAM**
 QCVEVVLASPCHNKAIRVGRS**FFKMS**DPNNRHELDGGEALVGLYQAFMLGDRPFLNV
 DISHKSFPISMPIEYLERFSLKAKIN**NTTNLDYSRR**FLEPFLRGINVVYTPPQSFQS
 APRVYRVNGLSR**APASSETFEHDKK**VTIASYFHSRNYPLKFPQLHCLNVGSSIKSIL
 LPIELCSIEEGQALNRKDQATQVANMIKYAATSTNVRKRKIMNLLQYFQHNLDPTISR
 FGIRIANDEFIVVSTRVLSPPQVEYHRSKRFTMVKNKNGSWRMDGMK**FLEPKPK**AHKCAVLY
 CDRSGRKMNYTQLNDFGNLIISQKAVNISLSDSVTYRPFDDERSLDTIFADLKRS
 QHDLAIVIIQQFRISYDTIKQKAELQHILTCIKQFTVERKCNNQTIIGNILLKINSK
 LNGINHKIKDDPRLPMMKNMTMYIGADVTHPSPDQREIPSVVGVAAASHDPYGASYNMQY
 RLQRGALEEIEDMFSITLEHLRVYKEYRNAYPDHIIYYRDGVSDGGQFPKIKNEELRCI
 KQACDKVGCKPKICCVIVVKRHHTRFFPSPGDVTTSNKFNNVDPGTVVDRDIVHPNEMQ
 FFMVSHQAIQGTAKPTRYNVIENTGNLDIDLQQLTYNLCHMFPRCNRSVSYPAPAYL
 AHLVAARGRV**YLTGTNR**FLDLKKEYAKRTIVPEFMKKNPMYFV

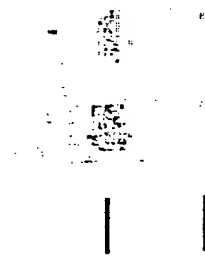
104250-25539960

Figure 25



S2 genomic
S2 cDNA
Library clone #7
Argo-2/p12
No template

Embryo
Adult
S2



0966557 25599960

Embryo extract

untransfected
hdicer transfected

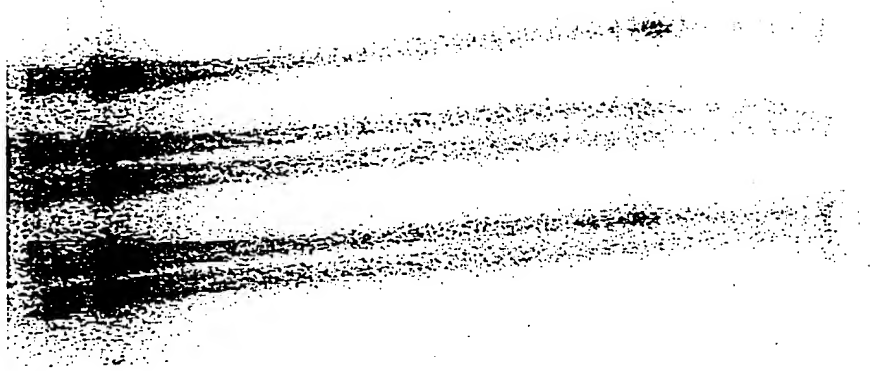
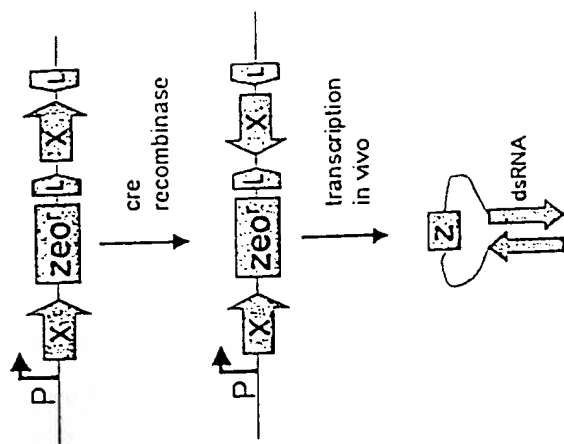


Figure 26

Figure 27



Dual luciferase assay 21hrs post-transfection (.4ug dsRNA)

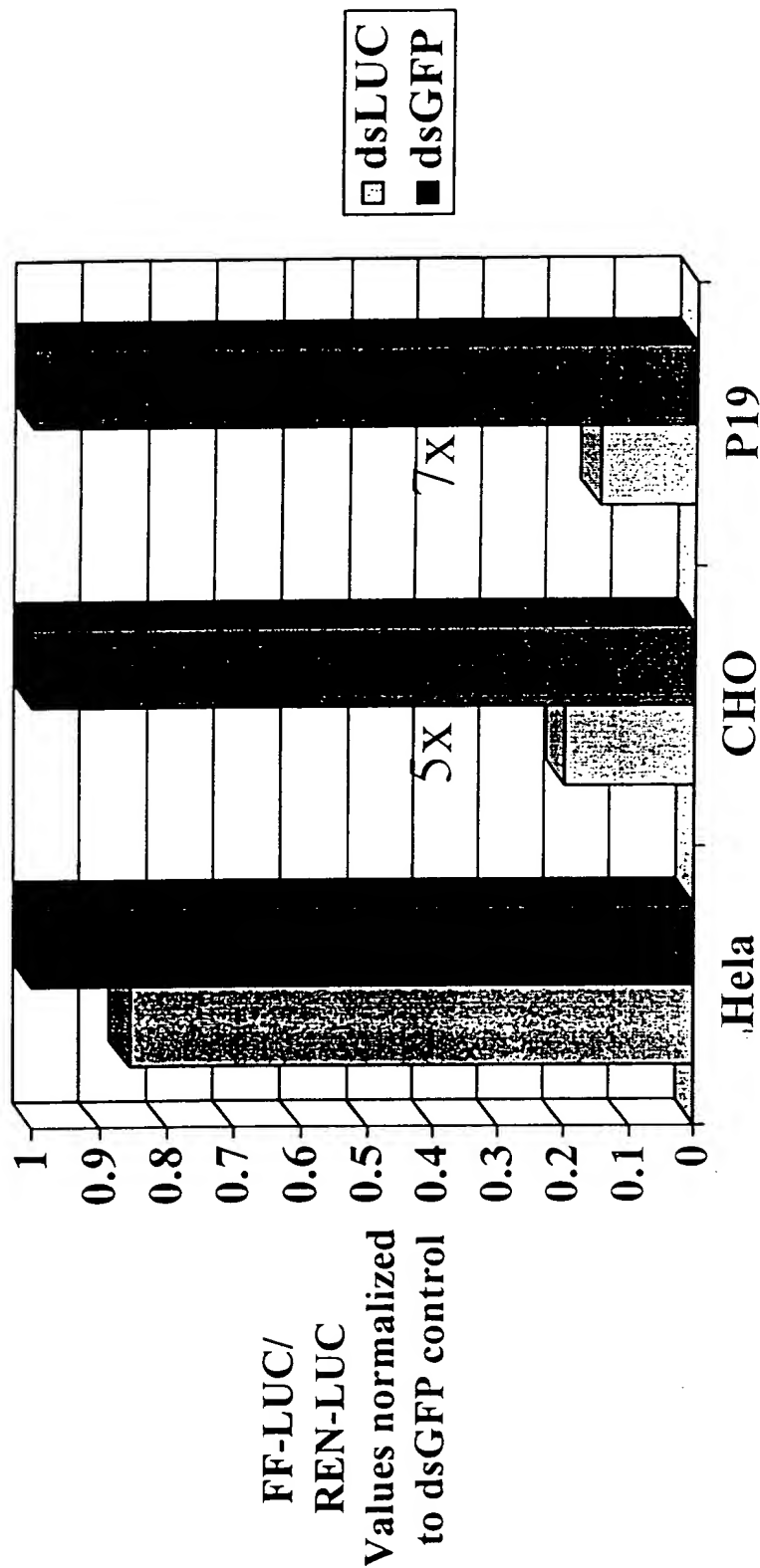


Figure 28

Dual luciferase assay with P19 cells (.5ug dsRNA)

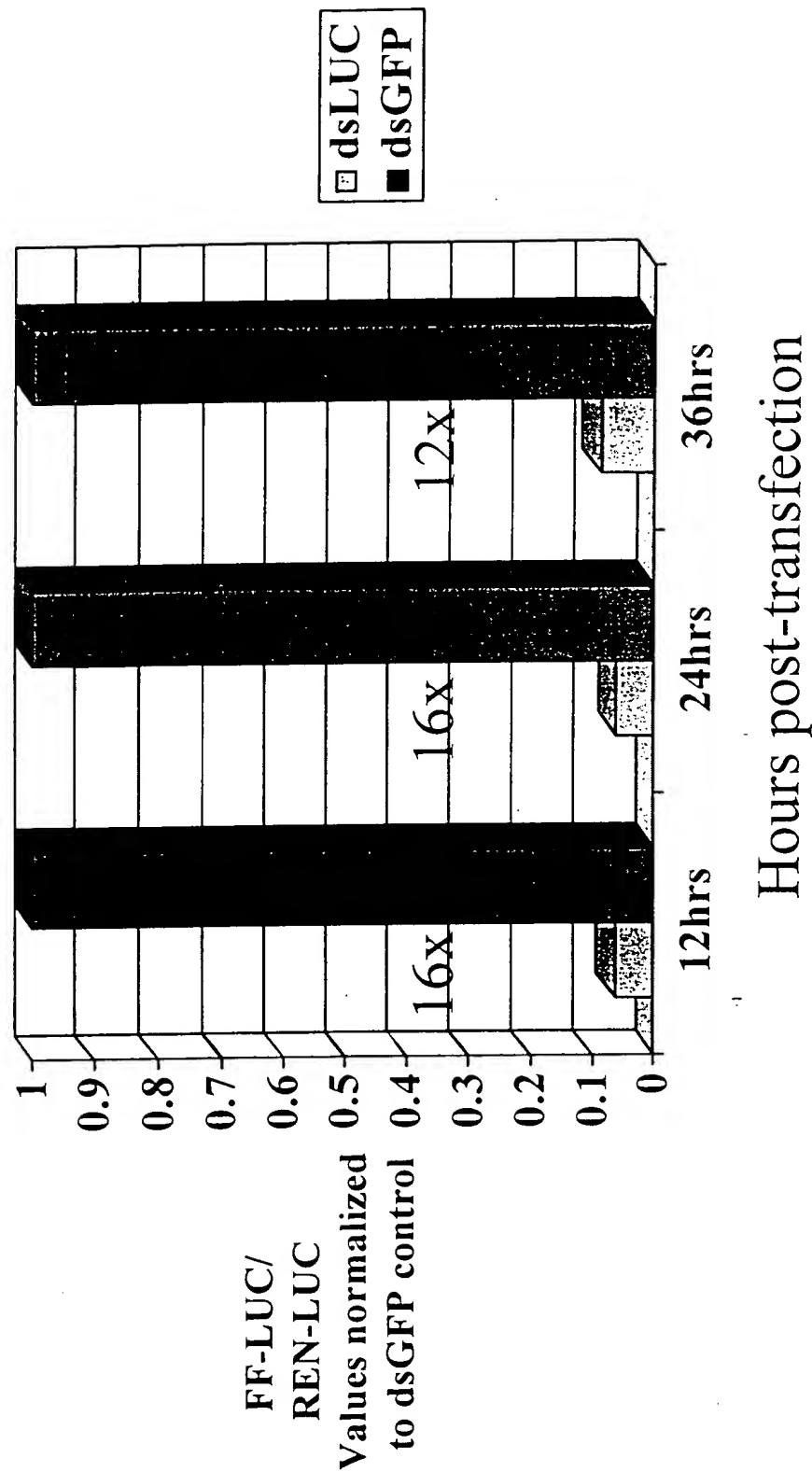


Figure 29

Dual luciferase assay using *in vitro* translation in P19 extracts

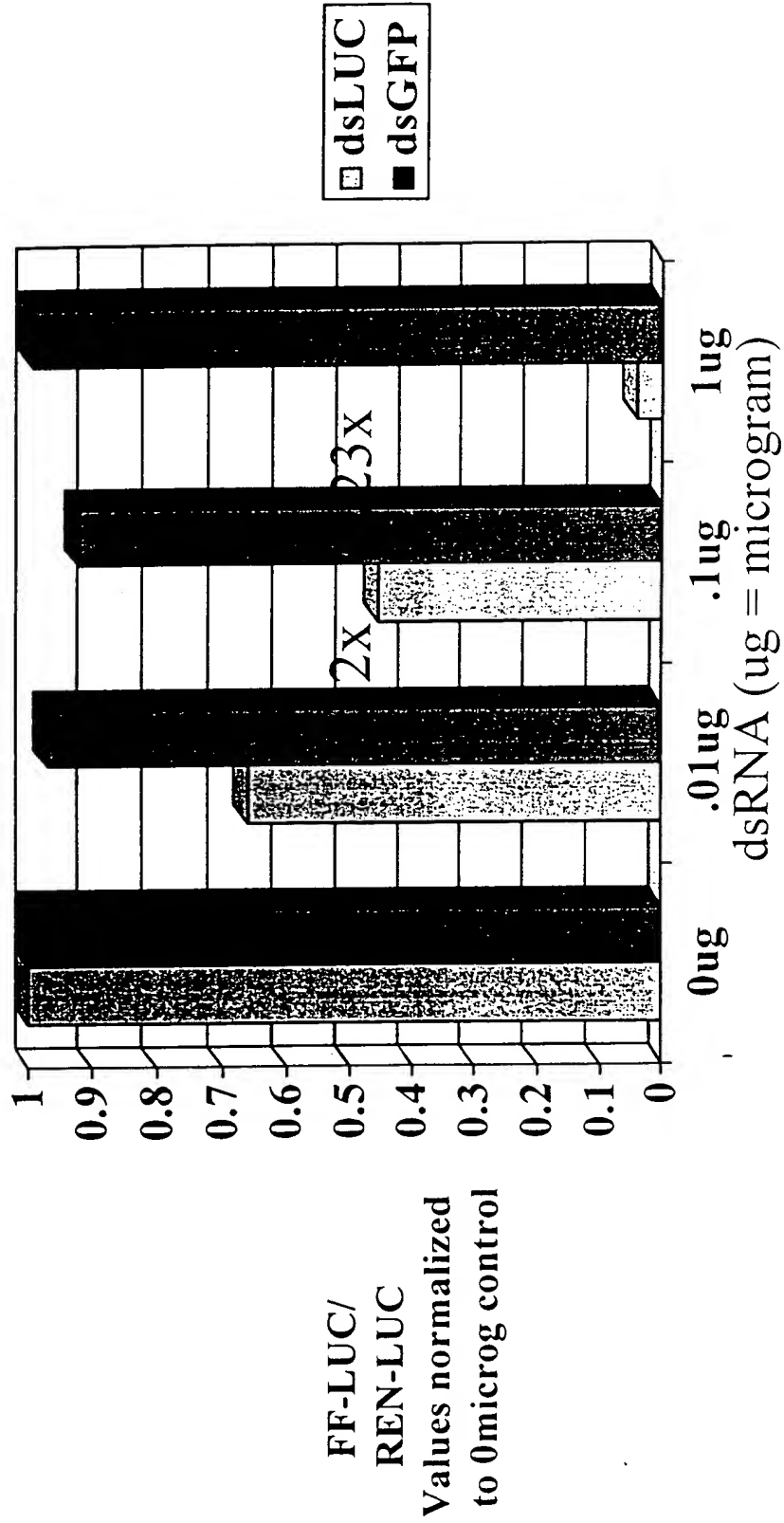


Figure 30

Suppression of luciferase activity is dsRNA-specific for *in vitro* translation assay

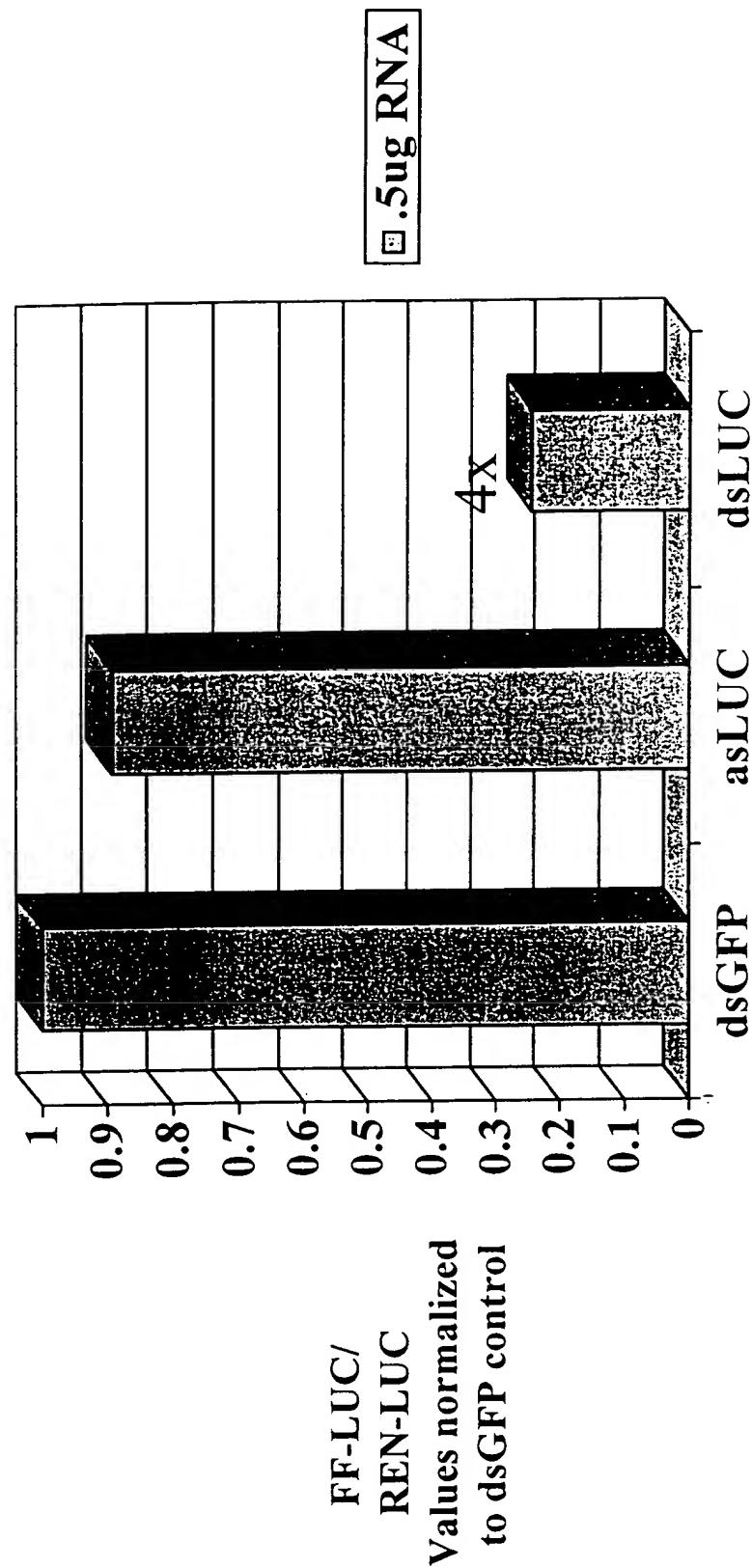


Figure 31

P19 cells soaked with various amounts of dsRNA for 12hrs in 2mL growth medium (alpha MEM, 10% FBS)

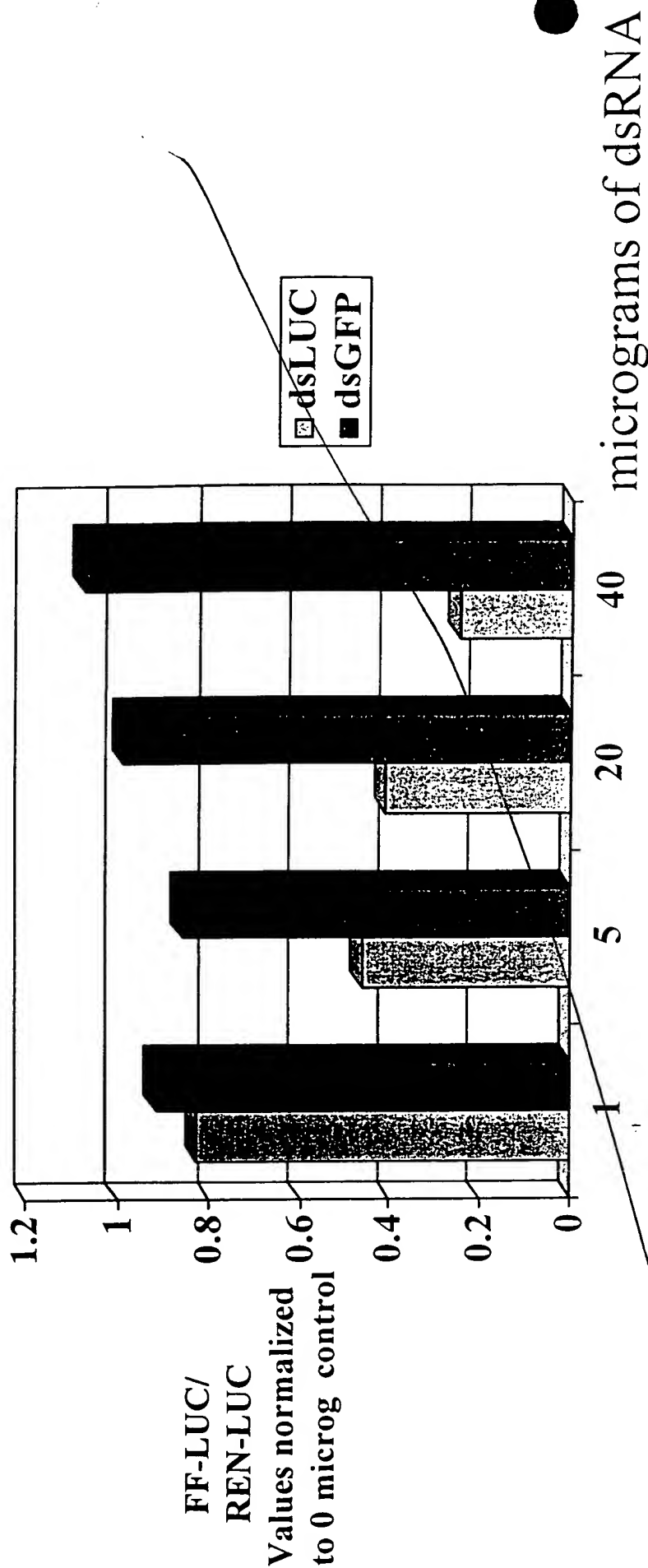
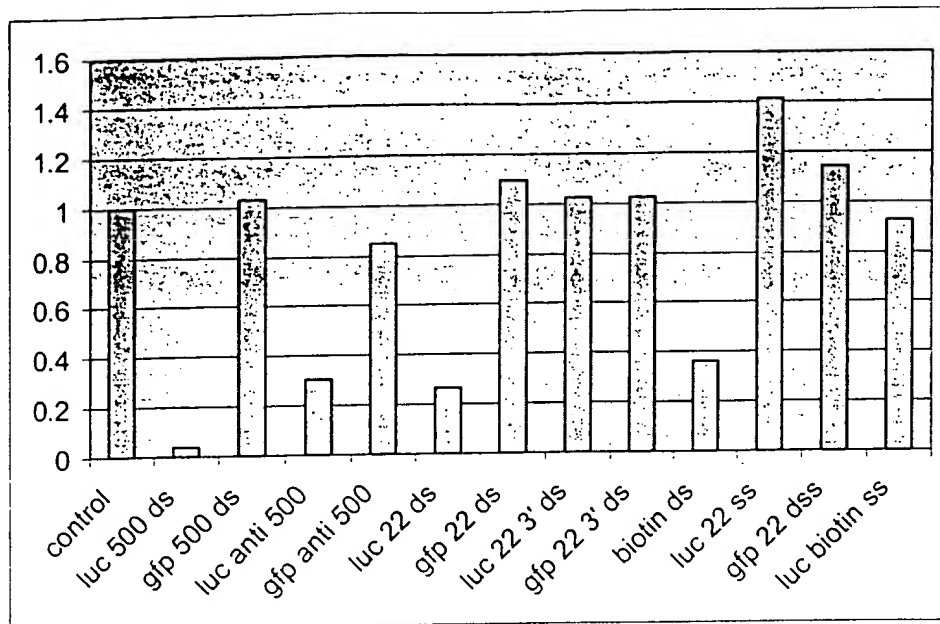


Figure 32

Figure 33



104250" 25599860